

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-2 and 4-22 will be pending. By this amendment, claim 9 has been amended.

§112 Rejection of Claim 9

In Section 3 of the office action, the examiner has rejected claim 9 under 35 USC 112, second paragraph, as being indefinite. As shown above, claim 9 has been amended, thereby obviating the rejection to claim 9. Accordingly, it is submitted that the examiner's rejection of claim 9 based upon 35 USC 112, second paragraph, has been obviated and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 1-2, 5-12, 15-18, 20-22

In Section 4 of the office action, the examiner has rejected claims 1-2, 5-12, 15-18, and 20-22 under 35 USC 103 (a) as being unpatentable over Schwaderer et al. (U.S. Patent 6, 393, 496; hereinafter referred to as " Schwaderer ") in view of Tanenbaum (document XP-002071762, Network architecture, 1992 publication; hereinafter referred to as " Tanenbaum "). This rejection is respectfully traversed below.

Regarding claim 1, as shown above, claim 1 calls for:

1. Method for communication between an application program and a network device driver program through intermediate structure software, comprising the steps of:

- a. supplying of application data units from the application program to a first program object being part of the intermediate structure software;
 - b. performing of first functions of the first program object on the application data units;
 - c. supplying of resulting first data units from the first program object to a second program object being part of the intermediate structure software;
 - d. performing of second functions of the second program object on the first data units;
 - e. supplying of the resulting second data units to the network device driver program;
- wherein supplying data units between program objects is accomplished by passing references pointing to memory locations of the data units, and
- wherein for at least one application data unit, the memory location storing data of the application data unit is the same memory location as the memory location storing at least some of the data of the corresponding first data unit and as the memory location for storing at least some of the data of the corresponding second data unit.

Accordingly, in one aspect of claim 1, data for an application data unit is stored in a memory location and the application data unit is supplied to the first program object by providing to the first program object a reference pointing to that memory location. The first program object performs functions on the application data unit to form a first data unit. At least some of the data of the first data unit is stored in that same memory location (the memory location storing data for the application data unit). The first data unit is applied to the second program objects by providing to the second program objects the reference point to the same memory location. The second program object performs functions on the first data unit to form a second data unit. At least some of the data of the second data unit is stored in that same memory location. Therefore, the same memory location is used for storing data of the application data unit, the first data unit, and the second data unit. Furthermore, the data units are supplied between program objects by passing references pointing to that memory location.

Considering the examiner's rejection of claim 1 in Section 4 of the office action, it does not appear that the arguments presented by the examiner in rejecting claim 1 over Schwaderer and Tanenbaum in Section 4 of the office action establish how the cited combination of Schwaderer and Tanenbaum shows or suggest claim 1. It appears that the examiner argues pages 21 and 22 of Tanenbaum show the use of references and the same memory location for multiple data units as called for in claim 1. However, it appears that this portion of Tanenbaum discusses sending an interface data unit (IDU) from one entity to another entity across layers in the OSI reference model and does not discuss the use of references and memory locations as called for in claim 1. In particular, in the last paragraph of page 21, Tanenbaum states (emphasis added):

" ... At a typical interface, the layer N + 1 entity passes an IDU (Interface Data Unit) to the layer N entity through the SAP as shown in Fig. 1-9. The IDU consists of an SDU (Service Data Unit) and some control information. The SDU is the information passed across the network to the peer entity and then up to layer N + 1. "

It appears that this passage of Tanenbaum discusses passing data between entities because one entity passes an SDU to the other entity and the SDU is the information being passed, rather than a reference. Accordingly, it does not appear that this passage addresses passing a reference pointing to a memory location as called for in claim 1. In addition, it does not appear that the examiner has explained how the IDU or SDU discussed on pages 21 and 22 of Tanenbaum address using the same memory location while passing references to that memory location as called for in claim 1. Without further explanation by the examiner, it is submitted that the examiner has not established how the cited combination of Schwaderer and Tanenbaum shows or suggests this aspect of claim 1.

Accordingly, it does not appear that the examiner has established how the cited combination of Schwaderer and Tanenbaum, as referenced by the examiner in rejecting claim 1, shows or suggests at least these aspects of claim 1, and so it is submitted that the examiner has not established how the cited combination of Schwaderer and Tanenbaum shows or suggests claim 1 as a whole. Claims 2, 3-14, and 19-22 depend from claim 1, and it is also submitted that the examiner has not established how the cited combination of Schwaderer and Tanenbaum shows or suggests claims 2, 3-14, and 19-22, through their dependence on claim 1. Similar arguments apply to claims 15 and 18, and so to claims 16-17 that depend from claim 15.

In addition, it does not appear that the examiner has established how the cited combination of Schwaderer and Tanenbaum shows or suggests claim 22. As shown above, claim 22 calls for:

22. Method according to claim 1, further comprising creating a service data unit for each application data unit, each service data unit including a size value indicating the size of data of the application data unit and an offset value indicating the memory location storing data of the application data unit,
wherein supplying data units between program objects by passing references includes passing service data units corresponding to the supplied data units.

In Section 4, the examiner appears to argue that the service data unit described by Tanenbaum on pages 21 and 22 shows creating a service data with a size value and an offset value as called for in claim 22. However, it does not appear that Tanenbaum describes how this service data unit includes an offset value indicating a memory location as called for in claim 22. Instead, it appears that the service data unit described by Tanenbaum includes the data itself to be passed to another entity. In the second paragraph of page 22, Tanenbaum describes breaking or fragmenting an SDU into several pieces. However, it does not appear that this paragraph

discusses storing an offset value in these pieces as called for in claim 22. Accordingly, it does not appear that the examiner has established how the cited combination of Schwaderer and Tanenbaum shows or suggests claim 22 .

Based upon the foregoing, it is submitted that claims 1-2, 5-12, 15-18, and 20-22 are not anticipated by nor rendered obvious by the teachings of Schwaderer and Tanenbaum, as presented and referenced by the examiner. Accordingly, it is submitted that the examiner's rejection of claims 1-2, 5-12, 15-18, and 20-22 based upon 35 USC 103 (a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 4, 13, 19

In Section 5 of the office action, the examiner has rejected claims 4, 13, and 19 under 35 USC 103 (a) as being unpatentable over Schwaderer in view of Tanenbaum, and further in view of Jardine (U.S. Patent 5, 619, 647; hereinafter referred to as " Jardine "). This rejection is respectfully traversed below.

Claims 4, 13, and 19 depend from claim 1. As discussed above, is submitted that the rejection to claim 1 has been overcome. Therefore, it is respectfully submitted that the rejection to claims 4, 13, and 19 has also been overcome through the dependence of claims 4, 13, and 19 on claim 1.

Based upon the foregoing, it is submitted that claims 4, 13, and 19 are not anticipated by nor rendered obvious by the teachings of Schwaderer, Tanenbaum, and Jardine, as presented and referenced by the examiner. Accordingly, it is submitted that the examiner's rejection of claims 4, 13, and 19 based upon 35 USC 103 (a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claim 14

In Section 6 of the office action, the examiner has rejected claim 14 under 35 USC 103 (a) as being unpatentable over Schwaderer in view of Tanenbaum, and further in view of Phillips et al. (U.S. Patent 6, 289, 383; hereinafter referred to as "Phillips"). This rejection is respectfully traversed below.

Claim 14 depends from claim 1. As discussed above, it is submitted that the rejection to claim 1 has been overcome. Therefore, it is respectfully submitted that the rejection to claim 14 has also been overcome through the dependence of claim 14 on claim 1.

Based upon the foregoing, it is submitted that claim 14 is not anticipated by nor rendered obvious by the teachings of Schwaderer, Tanenbaum, and Phillips, as presented and referenced by the examiner. Accordingly, it is submitted that the examiner's rejection of claim 14 based upon 35 USC 103 (a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Conclusion

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-2 and 4-22 is respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are

PATENT
Appl. No. 09/246,271
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made simply for clarification and to round out the scope of protection to which Applicants are entitled.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicants' representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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